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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,736	09/18/2003	Robert E. McClure	DEA-00005	6064

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EXAMINER
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BEAULIEU, YONEL

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/666,736

Applicant(s)

MCCLURE ET AL.

Examiner

Yonel Beaulieu

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1,4-9,11 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 2,3,10 and 12-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 6, 8, 9, 11, and 15 – 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tassle et al. (US 4,714,923).

Regarding claims 1, 4, 6, 8, 9, 11 and 15 – 17, Tassle et al. teaches a protocol selection matrix adapter for interfacing a host computer (102) to multiple in-vehicle networks on a vehicle through a plurality of protocols (via modules 106 – 112; see figs. 1, 2, 8, 9, and 13 at least), comprising a CPU (920) circuit providing protocol interactions, filtering of incoming messages (using item 916) and communication transfer to the host computer (via item 104), time stamping (fig. 2) and broadcast functionality operations (via item 940); a receiver-transmitter (940) for decoding (when received) the protocols; and a plurality of transceivers (114/118, 120/122, and 124/126) providing an interface between the vehicle and the host computer to support at least two vehicle protocols (note Tassle et al.'s system covers an area divided into a plurality of non-overlapping zones – see abstract; figs. 5-6). Tassle further teaches a flash memory, memory circuits reading/writing/reprogramming data (using circuitry of item 920 in fig.

13). ***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tassle et al. ('923).

As discussed above, Tassle et al. teaches all of the limitations except for the transceiver including a high-speed mode transceiver and a medium-speed mode transceiver (cl. 5) and the transceiver circuit including a two wire differential protocol each having an output coupled to a resistor (cl. 7).

However, to build a transceiver for transmitting at high speed or at medium speed and a two wire differential protocol each having an output coupled to a resistor would have been obvious to one of ordinary skill in the art at the time of the invention as involving only routine skill in the art.

#### ***Allowable Subject Matter***

Claims 2, 3, 10, 12 – 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 18 – 20 are allowed.

The prior art of record fail to teach a protocol selection matrix adapter for interfacing a host computer to a multiple in-vehicle networks on a vehicle through a plurality of protocols, comprising, among other limitations, operating the adapter on a plurality of modes including a vehicle configuration mode where the host computer configures the adapter to the vehicle, a stand alone data collection mode where the adapter collects data from the in-vehicle network, a data upload to the host computer mode where the adapter uploads data collected from the vehicle to the host computer, and a pass-through mode where data and other information from an in-vehicle network passes directly from the vehicle to the host computer through the adapter; wherein, the adapter supports each of the following protocols, namely,

SAE J1850, Ford Standard Corporate Protocol (SCP);

SAE J2284, Dual-wire Controller Area Network (CAN) Protocol;

ISO 9141 Ford, UART Protocol;

ISO 9141-2, CARB UART Protocol;

Key Word Protocol (KWP) – 2000;

Ford Data Communications Link (DCL) UART Protocol;

Ford UART Based Protocol UBP; and

Nissan Diagnostic Data Link (DDL) UART Protocol.

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The above adapter, wherein a decoder circuit employs five UART based physical layers, including UBP1/UBP2, DCL, DDL, 9141 Ford and ISO – 9141; a decoder circuit employing two quad bus buffered gate integrated circuits to route UART communications between a CPU circuit and the five UART based physical layers; and a program voltage circuit for controlling the voltage to the adapter, the circuit including voltage pump that outputs a voltage signal to digital-to-analog converter.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yonel Beaulieu whose telephone number is (703) 305-4072. The examiner can normally be reached on M-R, from 0900-1600.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas BLACK can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER